

REMARKS

35 U.S.C. §112, second paragraph

Claims 1-10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants have amended the claims pursuant to the Examiner's recommendation and, accordingly, the basis for the rejection under 35 U.S.C. 112 has been eliminated.

35 U.S.C. § 102(b)

Japan '210

Claims 1, 4, 6, 7 and 9 have been rejected under 35 U.S.C. § 102(b) as anticipated by Japan '210 (JP 8-324210). This rejection is respectfully traversed for the following reasons. The claims, as amended, specify a tread having repeating central arrays, each array forming a substantially elongate S-shaped pattern of tread elements of distinct size, shape or orientation. The array has a centerline L that is inclined less than 45 degrees and passes through the first and second ends at extremes of the S-shaped array.

The '210 reference shows a central array comprising an inclined row of blocks bounded by slant grooves. However, grooves 2,2 are parallel and linear and, consequently, the central array is not an S-shape. Moreover, the boundary grooves in the '210 reference are not continuous and curvilinear (claim 4). Still further, the array in the '210 reference cannot be deemed to teach tapered array ends (claims 11, 17 and the claims dependent therefrom) since the parallel and linear boundary grooves preclude a tapering of the array ends. There is further no teaching or suggestion in the '210 toward the present invention. The '210 reference, accordingly, does not anticipate the invention nor render the invention obvious to one skilled in the art.

As Japan '210 fails to anticipate the invention as recited in claims 1, 4, 6, 7 and 9, it is respectfully requested that this rejection be withdrawn.

Japan '207

Claims 1, 4 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan '207 (JP 6-135207). This rejection is respectfully traversed for the following reasons:

The '207 reference shows an array that is bounded at opposite ends by circumferentially extending grooves 19R and 19L and by parallel and generally linear side boundary grooves 26. The array of the '207 reference is not, therefore, substantially S-shaped (claim 1 and claims dependent therefrom); is not bounded by grooves that are continuous and curvilinear (claim 4); and cannot be deemed to teach tapered array ends (claims 11, 17 and the claims dependent therefrom) since the ends of the '207 array comprising blocks 121A, B, and C are wider than the portion of the array extending therebetween. The Examiner's combination of portions of grooves 19 and grooves 26 is deemed inappropriate for grooves 26 terminate at the circumferential groove 19 and cannot be considered in combination to be a continuous and curvilinear boundary groove. Moreover, the ends of the '207 array, were one to consider circumferentially extending groove 19 to define the end as the Examiner suggests, would not be inclined at all but, rather, extend circumferentially. In other words, blocks 121A, B, and C stack one on another in a circumferential, not inclined direction, if groove 19 is deemed to be a boundary groove to the array. The invention, teaches an array having an inclined elongate substantially S-shape that is not found or suggested by the cited reference. The '207 reference, accordingly, does not anticipate the invention nor render the invention obvious to one skilled in the art.

As Japan '207 fails to anticipate the invention as recited in claims 1, 4, 6-8, it is respectfully requested that this rejection be withdrawn.

Japan '935

Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan '935 (JP 6-143935). This rejection is respectfully traversed for the following reasons:

The '935 likewise is not deemed to teach or suggest the invention. The '936 array, while inclined, is not substantially S-shaped and does not include tapered end or continuous and curvilinear inclined array sides. The boundary grooves in the '935 reference are parallel and do not converge into a tapered end. Moreover, the array boundary grooves 7 do not extend between the circumferential grooves 4 and create instead an interlocking V-shaped pattern rather than a substantially S-shaped array. The array in '935 also includes enlarged ends that do not taper and are not formed by converging and intersecting grooves. It is further noted that the groove 4 is not an inclined boundary groove as claimed because it extends circumferentially, and is not at an incline relative to the centerline. Still further, the opposite ends of the arrays in the '935 reference do not project furthestmost from opposite sides of a centerline extending through the array (claim 13) and the shoulder rows of elements in the

'935 reference do not present inclined surfaces complementarily shaped and angled with respect to angled array sides (claim 17 and the claims dependent therefrom). In short, the '935 reference teaches an inclined array having straight sided array elements that do not taper and are not bounded by continuous and curvilinear boundary grooves.

As Japan '935 fails to anticipate the invention as recited in claims 1-3 and 6-8, it is respectfully requested that this rejection be withdrawn.

35 U.S.C. § 103

Claim 5 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Japan '935 (JP 6-143935) in view of Campos et al (US 4,598,748). This rejection is respectfully traversed for the following reasons. For the reasons set forth above, reference '935 fails to teach or suggest the primary combination of claim 1 and 4. One skilled in the art would not be instructed by the inclusion of reference '748 in as much as the tread in '748 is distinctive and entirely different from that of the claimed invention. Applicants are not claiming invention of a geometric pattern such as that shown in Figure 1 of the '748 patent. Rather, the incorporation of tread that is pitched to include three or more distinct pitch lengths arranged in a noise reducing sequence and an array configured pursuant to claims 1 and 4 that extends circumferentially across at least one or more pitches. No such combination of elements is found in the '748 patent for there is no similarity of array and tread pattern between the '748 and the invention. One skilled in the art would not, accordingly, be instructed on how to combine the '748 reference with the '935 reference and make the necessary modifications required to recreate the inventive structure. Any extension of either cited reference in the direction of the tread configuration of the invention is pure impermissible hindsight and not founded on any teaching in either reference.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '935 (JP 6-143935) in view of Japan '607 (JP 4-193607). This rejection is respectfully traversed for the following reasons. The '935 reference fails to teach the invention as claimed in claim 1. There is, therefore, no teaching in reference '607 that would lead one of skill in the art as to how to incorporate asymmetry into shoulder row blocks that also follow and outline a substantially S-shaped central array. Asymmetry between any shoulder and any central tread portion regardless of configuration is not sufficient to render a combination obvious when neither reference teaches the asymmetric shoulder elements that boundary a substantially S-shaped central array.

In conclusion, no cited art teaches the claimed invention set forth in claims 1-9 and 11-21. The combination of references does not remedy the fundamental deficiency of each reference in failing to show a substantially S-shaped center tread array. Entry of the amendments and newly submitted claims introduced herein, and an expeditious indication of allowance of all pending claims is, therefore, solicited.

Respectfully submitted,



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